AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for calibrating a laser three-dimensional digitizing sensor, comprising:

defining a three-dimensional ~~coordinator~~ coordinate system X-Y-Z;

providing a calibrating surface;

projecting a laser light plane onto the calibrating surface to form a bright line thereon, which is detected by the laser three-dimensional digitizing sensor to generate a two-dimensional digital image, wherein the laser light plane and the bright line are parallel to the X-Z plane;

translating the calibrating surface along the Z axis to establish a first ~~mapping~~ table of a the two-dimensional digital image corresponding to the Z coordinate.

rotating the calibrating surface by a predetermined first angle along the Y axis then translating along the Z axis to establish a second ~~mapping~~ table of the two-dimensional digital image corresponding to the X coordinate according to the established first ~~mapping~~ table.

2. (Currently Amended) The method for calibrating a laser three-dimensional digitizing sensor as claimed in claim 1 further comprising the following step:

rotating the calibrating surface by a predetermined second angle along the X axis then translating along the Z axis to establish a third ~~mapping~~ table of the two-dimensional digital image corresponding to the Y coordinate according to the established first ~~mapping~~ table.

3. (Currently Amended) An method for calibrating a laser three-dimensional digitizing sensor, comprising:

providing a base plane, a laser sensor generating a laser light plane, a flat block having a calibrating surface, a rotating axis perpendicular to the base plane, a translating axis perpendicular to the rotating axis;

projecting the laser light plane onto the calibrating surface forming a bright line;

adjusting the laser light plane parallel to the base plane;

adjusting the flat block such that the calibrating surface is perpendicular to the translating axis;

translating the flat block to a plurality of predetermined calibrating positions along the translating axis then recording corresponding bright line images made by the laser sensor at each calibrating position to establish a first ~~mapping~~ table ~~for~~ corresponding to the coordinate along the translating axis;

rotating the flat block a predetermined angle along the rotating axis, translating the flat block to the calibrating positions along the translating axis, then recording corresponding bright line images made by the laser sensor at each calibrating position to establish a second ~~mapping~~ table ~~of~~ corresponding to the coordinate along an axis perpendicular to the translating axis and the rotating axis from the established first ~~mapping~~ table.

4-8. (Cancelled)